

EXHIBIT “A”

SCOPE OF SERVICES

FOR

**INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ENGINEERING ANALYSIS
AND MINOR DESIGN - CONTINUING**

FINANCIAL PROJECT NUMBER:

258372 1 32 08

Revised: 08/30/21
08/20/21
08/18/21

INDEX

I.	DESCRIPTION.....	A-1
II.	OBJECTIVES	A-2
III.	ENGLISH UNITS.....	A-3
IV.	SERVICES.....	A-3
A.	ITS Engineering, Operations, & Management Assistance Services.....	A-5
B.	Preparation of Construction Contract Plans and Procurement Packages	A-8
C.	Community Awareness	A-10
D.	System Testing and Acceptance	A-10
E.	Construction Engineering and Inspection	A-10
F.	Survey Services.....	A-10
G.	Roadway Plans.....	A-10
H.	Traffic Control Plans.....	A-11
I.	Drainage Services	A-11
J.	Permitting and Environmental Services.....	A-12
K.	Geotechnical Services	A-12
L.	Structure Plans	A-12
M.	Signing and Pavement Marking Plans	A-13
N.	Signalization Plans.....	A-13
O.	Lighting Plans	A-13
P.	Utility Services.....	A-13
Q.	Construction Assistance.....	A-14
V.	PROVISIONS FOR WORK.....	A-14
A.	ITS Engineering Assistance.....	A-14
B.	Preparation of Construction Plans and Procurement Packages	A-14
C.	Community Awareness.....	A-15
D.	System Testing and Acceptance	A-15
E.	Environmental Permits.....	A-15
F.	Survey Services.....	A-19
G.	Roadway Plans.....	A-20
H.	Traffic Control Plans.....	A-20
I.	Drainage Services	A-20
J.	Geotechnical Services	A-21
K.	Signing and Pavement Marking Plans	A-21
L.	Traffic Signal Plans.....	A-21
M.	Lighting Plans	A-21
N.	Structural Services	A-21
O.	Utility Services.....	A-21
VI.	GENERAL.....	A-22
A.	Meetings.....	A-22
B.	Consultant's Schedule of Activities	A-22

C.	Coordination with Other Consultants	A-22
D.	Construction Cost Estimates and C.E.S. Quantities	A-22
E.	Technical Special Provisions/Specification Package.....	A-23
F.	Professional Endorsement.....	A-24
G.	Plans and Documentation Reproduction.....	A-24
H.	Design Documentation.....	A-25
I.	Phase Reviews	A-26
J.	Disposition of Plan Review Comments	A-27
K.	Americans With Disabilities Act (ADA).....	A-27
VII.	DEPARTMENT RESPONSIBILITIES	A-27
VIII.	COMPUTER SERVICES.....	A-27
IX.	LENGTH OF SERVICES	A-28

**EXHIBIT “A”
SCOPE OF SERVICES**

**FOR
FPN: 258372-1-32-08**

**INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ENGINEERING
ANALYSIS AND MINOR DESIGN - CONTINUING**

I. DESCRIPTION

The Florida Department of Transportation seeks Consultant services for the study, planning, design, management, review, and evaluation of Intelligent Transportation System (ITS) projects, device management, and operations that impact the transportation system in District Seven. The scope of work will be comprised of performing task work order assignments related to ITS studies, planning, design of minor ITS projects with preparation of contract plans, operations and management support of the Regional Traffic Management Center (RTMC), Road Rangers, Freeway Management Systems, Traveler Information System and Information Technology, Automated Vehicle Technology, assistance in the management of ITS projects for Data warehousing, review of contract plans, the evaluation of the ITS program and individual projects in District Seven. Consultant services also include minor roadway designs of Freeway and State Road improvements, miscellaneous structures, signalization, lighting, signing including overhead signing, Dynamic message signs, pavement markings, drainage where applicable, and right-of-way maps.

The Department is continuing the process of deploying ITS throughout the District, the primary focus being the Tampa Bay SunGuide Freeway Management System. This system will be operated from the Tampa Bay SunGuide Center, located behind the FDOT District 7 Headquarters Building at 11201 North McKinley Drive in Tampa, Florida. The SunGuide Center incorporates such functional capabilities as incident detection, verification, management, traveler information, and data storage, retrieval, and analysis.

The initial deployments of the Freeway Management System and SunGuide Center have used a System Manager approach to ensure design and procurement consistency as well as seamless integration. Also, it is planned to obtain Consultant services to prepare contract plans for future segments of the roadway system, as funds are made available. The current Tampa Bay SunGuide System Manager effort and Consultant services for other major components of the system may not be part of the work effort for the selected ITS Consultant.

The selected ITS Consultant will perform a myriad of critical assignments that require special emphasis for ensuring project success including a construction document review function as directed by the Department’s Project Manager of the contract plans developed

for the Tampa Bay SunGuide System by others. Also, the Consultant may be tasked to prepare contracts, scopes, specifications and plans for minor systems that are integrated into or support the Tampa Bay SunGuide System. The scope of work for task work orders includes, but is not limited to, providing operations and management support of SunGuide operations, preparing civil design, ITS architectural design, structural design, foundation design, mechanical design, electrical design, systems engineering design, communication design, surveying services, coordination of soil and geotechnical services with the District geotechnical consultant(s), utility investigation, construction plans, cost estimates, specifications, performing system integration, system configuration, system testing and acceptance, device and infrastructure management, facility management, central software support, system server and network support and construction engineering inspection.

II. OBJECTIVES

The Consultant is to provide services in support of newly developed and future Sun Guide operations, management, and related communications technology, and systems support.

The Consultant shall design and prepare construction plans, specifications, special provisions, and technical special provisions for construction phases related to Intelligent Transportation Systems (ITS).

The Consultant is to provide the Florida Department of Transportation (FDOT) with professional services for conducting needed studies related to the ITS program for District 7. The analysis and conceptual recommendations produced by the Consultant will provide valuable input into the development of ITS projects to be included in the Department's work program.

The Consultant shall perform those miscellaneous engineering services required to conduct studies and/or design, and prepare a set of concept or contract plans which may include State Road or Freeway signing including overhead, dynamic message signs, pavement markings, signalization, miscellaneous structures, lighting, sidewalk and/or bicycle ways, drainage where applicable; and right-of-way maps. It shall be the Consultant's responsibility to use the very best engineering judgment, practices and principles possible during the prosecution of the work commissioned under this contract.

This contract shall provide services to obtain study results as expeditiously as possible while maintaining a high degree of thoroughness and professionalism. The Project Manager shall identify work tasks for identified study types and projects. All plans shall be in accordance with the current Department memorandums, Department's Design Manual, Department's Quality Control Manual, current FDOT Roadway and Traffic Design Standards, Department's Facilities Design Manual, Department's Standard Specifications as modified, all Federal, State and County applicable building codes or approved procedures and any special design criteria from District 7. Plans shall be

furnished in reproducible form as specified in each Task Work Order and shall be suitable for bidding and construction purposes.

This contract shall provide budget planning for ITS funds, including current and outer years and manage replacement expectancies for ITS devices.

III. ENGLISH UNITS

All plans, technical special provisions, and design documentation for this project shall be prepared in English units of measure.

IV. SERVICES

The Department shall authorize, as Task Work Orders, the services to be performed under this agreement. No work shall begin until a Task Work Order has been authorized in writing by the Department. The below list of tasks provides a brief description of tasks. The issuance of these Task Work Orders will be dependent on the authorization of funds for the various work segments, and the Consultant's satisfactory performance of previously assigned tasks.

A list of possible tasks during the course of this contract is as follows:

- ITS engineering assistance using the System Engineering Management Plan and approach as developed by the District and/or state ITS Program Office.
- Operations and Management assistance for the SunGuide Center and related ITS and freeway management systems.
- Design of ITS devices and/or infrastructure to become part of roadway projects.
- Research and provide ROW information that may be incorporated into the base plan preparation for ITS projects.
- Attend meetings and make presentations at the following, but not limited to, ITS Committees for Hillsborough County MPO, Pinellas County MPO, and statewide ITS Working Group, and statewide Change Management Board.
- Review and consolidate comments on Tampa Bay SunGuide plans developed by others. These reviews may be conducted by the ITS Consultant or by a sub-Consultant to the prime ITS Consultant. There shall be a stipulation that: (1) the Consultant firm reviewing a set of plans did not develop that particular plan set; and (2) the Consultant firm reviewing the plans reports directly to the District's Project Manager.

- Review of ITS devices and/or infrastructure plans developed by others for inclusion in roadway projects within the Tampa Bay region.
- Perform field review of the projects assigned to identify problem areas and provide recommendations for corrective action.
- Maintaining a current Tampa Bay Regional ITS Architecture (TBRIA) and coordination with the local agencies in keeping either their area and/or project ITS Architectures in conformance and compatibility with the TBRIA. Assist in addressing barriers, such as institutional issues and agreements, procedures, and policy changes.
- Assistance with the management and operation of the Tampa Bay and Florida Advanced Traveler Information Systems (ATIS) for Tampa Bay including, but not limited to, the 511 telephone service, the Internet Site for Tampa Bay SunGuide, and services provided under the Intelligent Transportation Infrastructure Program (ITIP), and support services from the Tampa Bay SunGuide Center to Florida 511.
- Assistance and review of software documents and requirements being developed for the statewide SunGuide central software, especially as they apply to District 7's RTMC and local agencies.
- Maintain the asset management database to manage FDOT's fiber optic usage and coordinate with other agencies within District 7 on their usage of the transportation related fiber optic systems. The Consultant shall input and maintain these records within the database system.
- Review and/or perform analysis on various ITS projects using IDAS and/or other evaluation techniques to produce an evaluation plan for the Freeway Management System and conduct the evaluation including field data as appropriate. Assist in the gathering of information to support the selected statewide ITS measures of performance.
- Assist and review integration, configuration, and acceptance testing for ITS devices and infrastructure that is included as part of construction projects.
- Provide assistance with the Traffic Incident Management (TIM) and Road Ranger programs at the District 7 and statewide level by authoring or reviewing documents, preparing research, attending meetings, and facilitating or aiding in the facilitation of Incident Management Teams.

- Operate or assist with the migration/operation of the District's ITS device inventory and management system ITSFM.
- Review plans and attend meetings on ATMS projects on arterials in District 7.

The following list of services is more descriptive to indicate the major efforts that will be needed to accomplish most of the tasks. There may be other services required of the ITS Consultant to complete task assignments. In those situations, the Consultant shall demonstrate to the Department's satisfaction the qualifications to perform that specified service either using its own forces, a previously designate sub-Consultant already under contract, or obtaining the service of a new sub-Consultant who is qualified with the Department. Each service listed may be modified or non-performed as the individual tasks are assigned. This list provides examples of services that may be requested. The Department is not obligated to issue the tasks as shown.

The details of the services for each Task Work Order may be influenced by the results coming from other previous or on-going task work orders. The Consultant's roles and responsibilities include, but are not limited to:

A. ITS Engineering, Operations, & Management Assistance Services

1. Review of plans and specifications for the Tampa Bay SunGuide (TBSG) Center building, construction contracts to install field devices and construction contracts that include ITS infrastructure.
2. Review of project requirements and hardware configuration analysis, including system architecture, interfaces, communications, equipment, devices, and computers to assure consistency and compatibility with the Tampa Bay Regional ITS Architecture (RITSA).
3. Development of proper sequencing, cost estimating, scheduling, and coordination of the various projects related to the ITS effort in District 7. The cost estimating of projects will include the ability for a representative of the Consultant's staff to enter the Department's Trans*Port (Cost Estimating System) to enter LRE (Long Range Estimates). Also, all these services shall be coordinated with the statewide ITS effort in other Districts as well as the Traffic Engineering & Operations Office in Tallahassee.
4. Perform system engineering with integration at the local level and at the system level. Also be able to perform and/or observe testing throughout all phases of an ITS project or the applicable phases of a major roadway construction project.
5. Review utilization of systems, device hardware and software. The primary operations software that shall be utilized is developed and maintained by the

Department's Traffic Engineering & Operations Office known as the SunGuide central software.

6. Technical support for Department Project Managers during project procurement and management phases.
7. Review and support for District Project Managers in the procurement of ITS equipment and devices including software dependent hardware.
8. Coordination and assistance with the District and ITS Program Office in the development of system testing and acceptance procedures, as well as the overall and project specific System Engineering Management Plans (SEMP).
9. Coordination and assistance with the ITS Program Office in the conducting and documenting acceptance testing and configuration of all devices, equipment, and hardware installed by contractors.
10. Provide assistance with the management and operation of the SunGuide Center, Freeway Management Systems, and Traveler Information Systems.
11. Provide ITS facility and freeway information technology support related, but not limited to, the following: statewide SunGuide software and related database(s), software and firmware applications, asset management applications, networking, integration, configuration, troubleshooting, system and server support.
12. Assist in the management of facility and freeway operations, to include administrative support tasks related to specific projects.
13. Assist in the review, development, and implementation of statewide ITS performance measures.
14. Update and maintain Operation Plans for Tampa Bay SunGuide. Assist in establishing and integrating the operational procedures into the various operations centers in the region, as appropriate.
15. Update Concept of Operation (CONOPS) Plans for ITS Projects within the District.
16. Provide operational training to FDOT staff, local agencies, Consultants, or others as determined by the Department.
17. Assist in developing bid documents to procure contract services and commodities for operating intelligent transportation systems located in various

operation centers within the District and for other contracts related to the operation of the District Seven ITS System.

18. Assist in developing and updating maintenance procedures for the various intelligent transportation systems deployed within the District.

19. Review, maintain and update software for the Road Ranger AVL/GPS and report system.

20. Assist in developing/writing specifications for purchase, installation and maintenance of Road Ranger electronic equipment (radios, MDT's, etc.) for the Road Rangers and other vehicles.

21. Troubleshoot the radio and data systems in the Road Ranger vehicles.

22. Evaluate SunGuide Road Ranger module(s) and suggest changes and additions.

23. Assist with the development of Road Ranger policies and guidelines for Road Rangers, Traffic Incident Management, RISC, TMC Operations, etc.

24. Assists with QA/QC for Road Ranger contract through intermittent monitoring of AVL and data reporting.

25. Provides RR vehicle inspection services.

26. Assists in the compilation of statistical reports, including but not limited to performance measurement reports, QA/QC of reports drafted by other parties and topic specific special reports.

27. Assists in the planning and coordination for and attends Traffic Incident Management (TIM) meetings.

28. Record, transcribe (if necessary) and maintain minutes of Traffic Incident Management (TIM) Meetings.

29. Assist with tracking of training and certification requirements for Road Ranger Operators.

30. Assist with procurement of items for projects in progress and/or items required for ITS equipment maintenance.

31. Assist with design and administration of training for TMC Operations personnel, Road Rangers, and other groups.

32. Provide coordination and assistance to the FDOT Operations Manager in the management of the Road Ranger, TIM, RISC, and other Programs.

B. Preparation of Construction Contract Plans and Procurement Packages

The Department desires to obtain assistance from the CONSULTANT for performance of miscellaneous engineering services of a minor nature including, but not limited to: ITS related devices, such as computer hardware, software, communication equipment, video processing equipment, CCTV, DMS, vehicle detection systems, etc., revision and/or updating of previously completed construction plans; minor roadway designs of minor freeway and state road improvements, minor structures, signalization, lighting, signing including overhead signing, pavement markings and drainage where applicable; and right-of-way maps. The Consultant shall work with the staff of the Department to select the most appropriate procurement mechanism for the various types of equipment.

1. Provide all necessary engineering and drafting services required for revising and updating previously prepared construction plans and specifications to conform to current FDOT, AASHTO Standards and Specifications and the desires of the Department as made known to the CONSULTANT.
2. Prepare complete construction plans and draft all special provisions for all phases of construction for each minor design project assigned under this agreement. Plans shall include, as appropriate, minor roadway design, intersections and highway improvements, maintenance of traffic, utility relocation, minor structures, sign support structures and details, drainage facilities, roadway lighting, signing, signalization, pavement markings and incidental items.
3. Prepare preliminary estimates of construction cost based on unit prices furnished by the Department. The estimates will be submitted as required by the Department's Project Engineer on coding sheets furnished by the Department.
4. Provide Record Quantity computation books in a format comparable to examples furnished by the Department, lighting and signalization justification reports, signalization analysis and other studies as required by the Department.
5. Submit to the Department a Design Documentation Booklet with design notes, reports, calculations and other related information required to document the design conclusions reached during the development of the construction plans.
6. Prepare complete and accurate right-of-way maps, including legal descriptions, satisfying the requirements of the Department, as set forth in Department

policies and procedures and furnish same to the Department in reproducible form. Right-of-way maps will contain sufficient information thereon to enable the Department to complete instruments of conveyance according to Department procedures for transfer of title for required right-of-way.

7. Prepare permit application(s) as required for submittal to other agencies by the Department including forms, sketches, and hydraulic calculations.
8. Furnish a complete design field survey to include topography, cross sections, drainage outfalls, utilities, right-of-way and other surveys including field investigations. All work will be in accordance with the criteria established by the Department's Highway Field Survey Specifications, and will be coordinated with and subject to review by the District Location Engineer.
9. Make such reviews, attend such meeting and make such contacts as are necessary for proper preparation of plans and special provisions for these minor projects.
10. Serve as an expert witness in the legal proceedings related to these minor projects if required by the Department. The fee for these services shall be established if and when they are needed.
11. Provide traffic studies, including traffic counts with turning movements and pedestrian activity.
12. Prepare a draft of special provisions required for the construction of the roadway, minor structures, and traffic operations portion of this project.
13. Notify the Department of any utility conflicts and coordinate with the Department in all relocation efforts.
14. To maintain uniformity and design consistency for the deployment of ITS on the FIHS Limited-Access Facilities, the ITS Program Office will develop Design Criteria Packages, Performance Criteria, and ITS Standards and Specifications. The Consultant shall coordinate with the ITS Program Office to make use of these documents in the development of the contract plans and procurement packages for any project.
15. In the preparation of any contract plans, the ITS Consultant shall be responsible to research the Department's or local agency records to determine the public right-of ways limits and existing easements. These limits and easements shall be shown on the plans to the degree necessary to ascertain that the proposed ITS contract work will be performed within existing public right-of-way and/or easements.

C. Community Awareness

A Community Awareness Plan (for each project assigned) may be developed by the Consultant in compliance with District Seven's latest guidelines. Once the Department approves these plans, the Consultant may be given a task work order to assist in implementing the plan.

D. System Testing and Acceptance

The Consultant may develop project testing and acceptance procedures and be responsible for conducting and documenting testing on the local level, subsystem level, and final system level. The tests and acceptance procedures may be developed by the ITS Program Office with assistance and review by the Consultant. The ITS Program Office will also assist the Consultant in conducting and documenting the testing. The Consultant shall coordinate equipment testing with Traffic Engineering Research Laboratory (TERL). The Consultant shall ensure the equipment is functioning as expected and that it is installed properly. The Consultant shall address warranty issues during both the procurement phases and system testing, so as to obtain any appropriate warranties. The Consultant shall ensure the malfunctioning equipment will be returned to the manufacturer and a replacement is installed in its place. System acceptance tests will be approved upon receiving satisfactory test results as per standards documented in the technical special provisions.

E. Construction Engineering and Inspection

The Consultant may provide the CEI (Construction Engineering and Inspection) for the construction of an ITS project. The CEI work on projects shall follow the state approved System Engineering Management Plan (SEMP) and the ITS Program Office shall assist the Consultant in providing quality assurance. The Consultant shall provide these services upon authorization of a Task Work Order.

F. Survey Services

The Consultant may provide survey services including subsurface utility engineering, necessary to complete the design plans for any assigned project. The required survey services will be included in the scope of services for each task work order.

G. Roadway Plans

Roadway Plans, if necessary for a project, may be prepared to include, but not limited to: plotting of all survey data; establishment of profile grades, soil test

information, key map, drainage maps, plan-profile sheets (including geometric calculations); ramp profiles, intersection details, pavement design reports, typical section sheets, summary of quantities (including computation booklet), and summary of drainage structures, drainage structure detail sheets, lateral ditch/outfall sheets, storm water treatment details, environmental mitigation details (if required), and cross-section sheets (including earthwork computations), traffic control plans, utility adjustment plans, and other detail sheets necessary to convey the intent of the work required. A detail of the required roadway design services will be included in the scope of services for each Task Work Order and may include the following:

1. Pavement Design Package
2. Typical Section Design Package
3. Typical Sections
4. Back of Sidewalk Profiles
5. Horizontal Alignment and Profile Grade (15% Line and Grade)
6. Plan/Profile Sheets
7. Intersection Profiles and “Plateauing”
8. Driveway Connections
9. Design Documentation

H. Traffic Control Plans

Traffic shall be maintained on affected roadways throughout the construction duration of each project assigned. The Traffic Control plan shall detail maintenance of traffic or construction phasing, patterns for traffic flow, any necessary temporary roadway plans, signalization (including detailed timing and phasing), temporary lighting, temporary drainage, appropriate signing and pavement marking and itemized quantities. A construction staging plan shall also be included. The required services will be included in the scope of services for each task work order.

I. Drainage Services

The Consultant may perform complete drainage investigations and analyses necessary to prepare a design that will adequately drain each project assigned in accordance with the Department's design criteria. Services include the establishment of outfall locations and the design thereof in conformance to standard Department procedures. The drainage design shall be submitted to the Department for approval at the earliest possible date.

A detail of the required drainage services will be included in the scope of services for each task work order and may include the following:

1. Bridge Hydraulics Recommendation Sheet

2. Bridge Hydraulic Report
3. Storm water Management
4. Box Culverts
5. Alternate Culvert Materials
6. Assessment of the condition of Existing Facilities
8. Erosion control Plans
7. Drainage Maps

J. Permitting and Environmental Services

The Consultant may prepare all documentation and drainage calculations as necessary to obtain exemptions from storm water management regulations (quality and quantity) and other permitting requirements where appropriate. Where permits may be required for construction, the Consultant shall provide the necessary permit submittal package and agency coordination as required to secure all necessary construction permits from all agencies with jurisdiction.

A detail of the required permitting and environmental services will be included in the scope of services for each assigned project.

K. Geotechnical Services

The DEPARTMENT will provide all necessary Geotechnical services for this project. The Consultant will be required to interact with the District Geotechnical Engineer (DGE) office and any geotechnical consultant assigned to the project by the DGE office under a district-wide contract. The Consultant will be required to coordinate and review geotechnical investigation reports as requested by the Department.

L. Structure Plans

The Consultant shall prepare one (1) complete set of final plans for each structure assigned.

A list of Structures and Design Data for each Bridge, Concrete Box Culvert, Permanent Retaining Walls, and/or Critical Temporary Walls will be furnished in the scope of services for each task work order, if required.

The Consultant may be required to provide structural design and construction plans for one or more of following types of structures, which are needed to support cameras, dynamic message signs and other traffic and ATMS related components:

1. Overhead cantilever sign structures
2. Overhead span sign structures

3. Mast arms structures
4. Mono-tube span structures
5. High mast poles
6. Bridge mounted structures

M. Signing and Pavement Marking Plans

Services may include, but are not limited to, the preparation of scaled drawings for signing and pavement markings, cross-sections at major signs, key sheets, quantities (including signing and pavement marking quantities), tabulations of quantities by sheet, detail of all major signs, including structure design for cantilever, bridge mounted, multi-post ground mounted and/or overhead sign structures, pole and foundation design for span wire mounted signs and any special details that will be required. The Consultant may also design vehicle volume counting.

N. Signalization Plans

Plot existing or proposed topography, existing utilities (above and below ground), storm sewer, right-of-way, key sheets, design of proposed improvements, quantities, pole schedule (including any design calculations), interconnect pole location sheets and any notes or special details needed.

Complete foundation design and details shall be provided by the Consultant for all mast arms, steel poles or concrete strain poles. The foundation design shall be based on geotechnical data provided by the District Geotechnical Engineer (DGE) office.

O. Lighting Plans

The Consultant may be tasked to provide complete lighting plans as specified in the Task Work Order. Services shall include but are not limited to preparation of the plan layout; typical sections; a key sheet; quantities (including lighting quantity) lighting computations, tabulation of pole data sheets, and any special detail sheets necessary. The location of poles, type of materials, method of attachment, conduit size, etc. shall be included in the roadway plans as appropriate.

P. Utility Services

The Consultant shall provide services for the performance of utility negotiations work as listed in each task work order.

Q. Construction Assistance

The Consultant may provide certain Construction Assistance Services. Services may include, but are not limited to: Plans Update, Engineering Assistance, Expert Witness Testimony, and Review of Shop Drawings. The required services will be included in the scope of services for each task work order.

V. PROVISIONS FOR WORK

A. ITS Engineering Assistance

The ITS Consultant shall provide personnel qualified in and understands the general principles of intelligent transportation systems as to their design, operation, and integration. Also, personnel must be qualified in the understanding and development of the national ITS Architecture. The Consultant shall provide qualified personnel to assist the Department in responding to various issues related to the District 7 ITS program. This shall include attending meetings to assist or represent the Department on ITS issues. This may also include development of reports and/or presentations on District ITS issues.

The Consultant assigned personnel shall be based either in the Department's Tampa Bay SunGuide Center or at a Consultant office within the Tampa Bay area.

B. Preparation of Construction Contract Plans and Procurement Packages

The Consultant shall provide the necessary engineering and design services required to prepare the construction plans for assigned ITS projects. The plans shall conform to the latest standards as developed by the Department and their ITS Program Office. The Department at intervals specified by the Department shall review plans. The sequence of reviews and the content of the submittals will follow, as much as possible, the phases as outlined in the Department Design Manual. This is further specified in section VI., I. of this Scope of Services.

The Consultant shall work with the staff of the Department to select the appropriate procurement method, which may include, but is not limited to:

1. Procurement and installation of the equipment by the Consultant.
2. Procurement of the equipment by the Consultant for installation by a contractor or manufacturer.
3. Procurement by the Department with the Consultant acting on the behalf of the Department using Department procedures.
4. Procurement using statewide materials contract.

Based on the procurement method selected, the Consultant shall be responsible for preparing a package that has the specifications and other documents to procure the material. In selecting the procurement plan, the most favorable alternatives need to be compared side by side listing all pros and cons associated with each option. This assessment phase shall allow sufficient time for procurement and delivery of the needed equipment to the project site so that system deployment can continue on schedule.

C. Community Awareness

The Community Awareness Plan, to be developed by the Consultant, shall be in compliance with District Seven's latest guidelines. The Consultant shall attend meetings, prepare displays, make presentations, etc. to assist the Department in presenting the projects to local government agencies and interested organizations.

D. System Testing and Acceptance

The Consultant shall, with the assistance of the ITS Program Office, provide system testing and acceptance procedures in accordance with Department Standards. The Consultant shall represent the District in establishing the procedures, and as needed, will either conduct and/or assist the ITS Program Office in conducting the tests.

E. Environmental Permits

The CONSULTANT shall notify the Department Project Manager, Environmental Permit Coordinator and other appropriate personnel in advance of all scheduled meetings with the regulatory agencies to allow a Department representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings.

1. Preliminary Project Research

The CONSULTANT shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

2. Complete Permit Involvement Form

This section is not applicable in the Seventh District.

3. Establish Wetland Jurisdictional Lines

The CONSULTANT shall collect all data and information necessary to determine the boundaries of wetlands and surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct a Department project.

The CONSULTANT shall be responsible for but not limited to the following activities:

Determine landward extent of state waters as defined in Chapter 62-340 FAC as ratified in Section 373.4211 FS

Determine the jurisdictional boundaries of wetlands and surface waters as defined by rules or regulations of any other permitting authority that is processing a Department permit application.

Prepare aerial maps showing the jurisdictional boundaries of wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1"=200' and be recent photography. The maps shall show the jurisdictional limits of each agency. Xerox copies of arials are not acceptable. All jurisdictional boundaries are to be tied to the project's baseline of survey. When necessary, jurisdictional maps shall be signed and sealed by either a Registered Professional Engineer or a Registered Land Surveyor.

Acquire written verification of jurisdictional lines from the appropriate environmental agencies.

Prepare a written assessment of the current condition and relative value of the function being performed by wetlands and surface waters. Prepare data in tabular form which includes ID number for each wetland impacted, size of wetland to be impacted, type of impact and identify any wetland within the project limits that will not be impacted by the project.

The CONSULTANT shall provide the following at the time of the Phase I plans submittal:

Surveyed and approved jurisdictional boundaries on plan sheets.

Detailed estimate of wetland impacts, including but not limited to the acreage and type of impact. This shall be provided in writing to the Environmental Permit Coordinator based on the approved jurisdictional boundaries.

For projects with one or more acres of wetland impact; WRAP or UMAM assessments (whichever is appropriate based on coordination with the agencies) shall be provided to the Environmental Permit Coordinator for submittal to SWFWMD.

4. Agency Verification of Wetland Data

The CONSULTANT shall be responsible for verification of wetland data identified in Section 3 and coordinating regulatory agency field reviews, including finalization of wetland assessments with applicable agencies.

5. Complete and Submit All Required Permit Applications

The CONSULTANT shall prepare permit packages as identified in the Project Description section. *All permit applications shall be submitted concurrently with the Phase II plans for review by the DEPARTMENT.*

The CONSULTANT shall collect all of the data and information necessary to obtain the environmental permits required to construct a project.

The CONSULTANT shall prepare each permit application for DEPARTMENT approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

The CONSULTANT shall evaluate the project to determine if a “Storm Water Discharges Associated with Industrial Activity Permit” is required as defined in 40 CFR Part 122.26(b)(14)(x) and/or Chapter 62-621.300(4)(a) FAC. If no permit is required, this determination shall be documented to the Project Manager and the Environmental Permit Coordinator in writing. If a permit is required, the CONSULTANT shall prepare a Storm Water Pollution Prevention Plan for each construction project.

The CONSULTANT shall be responsible for the payment of all permit application fees.

- 6. Prepare Dredge and Fill Sketches**
- 7. Prepare USCG Permit Sketches**
- 8. Prepare Easement Sketches**
- 9. Prepare Right-of-Way Occupancy Sketches**
- 10. Prepare Coastal Construction Control Line (CCCL) Permit Sketches**

11. Prepare Tree Permit Information (*Not applicable in the Seventh District*)

12. Mitigation Coordination and Meetings

The CONSULTANT shall coordinate with Department personnel prior to approaching any environmental permitting or reviewing agencies. Once a mitigation plan has been reviewed and approved by the Department, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

The CONSULTANT shall provide complete and timely responses to the Department's semi-annual requests for updated information for the project if it will have, or potentially have impacts to be mitigated for using the Seventh District Wetland Impact Inventory (F.S. 373.4137). The CONSULTANT shall inform the Department immediately of wetland impact changes that could affect the project's status on the mitigation inventory between formal update requests. The CONSULTANT shall communicate to the Department any design or jurisdictional review issues that may impact their wetland impact estimates as the project progresses through design.

13. Mitigation Design

This section is not applicable in the Seventh District.

14. Environmental Clearances

The Department shall prepare clearances for all pond and/or mitigation sites identified after the PD&E was completed.

Archaeological and Historical Features: The Department shall collect data necessary to completely analyze the impacts to all cultural and historic resources by the pond and/or mitigation sites and prepare a Cultural Resource Assessment Request Package.

Wetland Impact Analysis: The Department shall analyze the impacts to wetlands for the pond and/or mitigation sites and complete the Wetlands Evaluation Report.

Wildlife and Habitat Impact Analysis: The Department shall collect data necessary to perform an Endangered Species Biological Assessment and analyze the impacts to wildlife and habitat by the pond and/or mitigation sites.

Contamination Impact Analysis: The Department shall perform the necessary analysis to complete the Contamination Screening Evaluation for the pond and/or mitigation sites and complete the Contamination Screening Evaluation Report.

15. **Technical Meetings**
16. **Quality Assurance/Quality Control**
17. **Supervision**
18. **Coordination**

F. Survey Services

Survey services will be accomplished in accordance with the Department's Highway Field Survey Specifications, the Department's Location Survey Manual (Chapters 1 thru 9, Appendices A thru D) and current memorandums. Work must comply with the Minimum Technical Standards for Surveying and Mapping Rule 61G17-6, Florida Statute 472.027. Department of Environmental Protection Rule, Florida Administrative Code Chapter 18-5 (Florida Statute 177 - Part Two), Department of Environmental Regulations state jurisdiction boundary surveys (where applicable). G.P.S. Services must be provided in accordance with the **F.D.O.T. District Seven Standards for Consultant Submitted G.P.S. Static Control Projects**, Roadway and Traffic Design Standards (Index Series 600), F.D.O.T. District Seven Quality Assurance Guidelines, Safety Standards which may be adopted by the Department and any special instructions from the Department. All data will require the certification of a Professional Surveyor and Mapper, licensed to practice in the State of Florida. **All Survey Form deliverables such as Benchmark Reference Forms, Certified Corner Record Forms, etc. will be provided in both hard copy and in a Microstation (DGN) File. The Microstation (DGN) File will be submitted to the Department on 3.5" Diskettes or CD ROM. The Consultant shall submit to the Department survey notes, computations, and necessary reproducible Survey Maps (prepared by CADD) to document their surveys. Electronic data recording shall be submitted and indexed in a manner such that it may be stored and be readily utilized in the future. Any and all field survey work performed for the Department will be recorded in field books (furnished by the Consultant). Field books will be 6-1/2" by 8-3/4" cross section book with 10 by 10 grid on both sides of opening in the format shown in the Department's Location Survey Manual. All electronically collected data shall be per Appendix C topic No. 550-030-030-a (Automated Survey Data Gathering). It should be noted that only survey data recorded in the format as shown in the Departments Location Survey Manual shall be accepted unless otherwise directed by the District Location Surveyor. These field books shall be given a peer review by the Consultant Surveyor before being sent to the Department for review. The field books shall be certified by the Consultant Surveyor in responsible charge of work being**

performed before the final product is submitted. Copies of the survey notes, computations, plats and necessary Right-of-Way Control Survey drawings shall be submitted to the Department for preliminary review (two hard copies and DGN file(s) on Disks). When the map is submitted for final review, the survey notes and computations (corrected for any Department comments) shall be resubmitted. The survey notes shall include documentation of decisions reached from meetings, telephone conversations or site visits. All phases of the Survey data recorded in the field books (such as Bench line, Reference Points, etc.) will be kept together, not in different sections throughout the book. The Department **WILL NOT ACCEPT** field survey radial locations of Section Corners, Platted Subdivision Lot and Block Corners, Alignment Control Points, Alignment Control Reference Points and Certified Section Corner References. The Positions of these points **MUST** be derived from: Method 1) On Line or Traverse Surveying or Method 2) Parallel Offset Surveying. If a rare situation arises that calls for a deviation from Methods 1 or 2, written permission must be acquired from the District Location Surveyor.

G. Roadway Plans

All plans shall be prepared totally by CADD, in accordance with the latest English standards adopted by AASHTO, Department Standard Specifications, Department Roadway and Traffic Design Standards, Department current memorandums, Department Roadway Design Manual, Department Flexible Pavement Design Manual and/or the Jointed Plain Concrete Pavement Design Manual, and Department Basis of Estimates Manual and Department Drainage Manual (current), F.H.P.M. 6-7-3(2). Pedestrian/Bicycle amenities shall be in accordance with FDOT applicable standard typical sections, FDOT Pedestrian Planning and Design Handbook and FDOT Bicycle Facilities & Design Manuals. Plans shall be accurate, legible, complete in design, and drawn to the appropriate scale, furnished in reproducible form on material acceptable to the Department. A project layout sheet and drainage structure sections shall be included in the plans.

H. Traffic Control Plans

All Traffic Control Plans shall be prepared in compliance with the latest design standards and practices set forth in the Manual on Uniform Traffic Control Devices and current FDOT Roadway and Traffic Design Standards.

I. Drainage Services

All drainage drawings shall be prepared totally by CADD. The drainage design shall be in accordance with Department current memorandums, Department Drainage Manual, Department Standard Specifications, Department Roadway

Design Manual, FHPM 6-7-3(2), and Consultant Plans Submittal Requirements. Plans shall be accurate, legible, complete in design and drawn to the appropriate scale, furnished in reproducible form on material acceptable to the Department.

J. Geotechnical Services

The DEPARTMENT will provide all necessary Geotechnical services for this project. Any Geotechnical services will be provided through the District Geotechnical Engineer (DGE) office and any geotechnical consultant assigned to the project under a district-wide contract.

K. Signing and Pavement Marking Plans

All plans and designs shall be prepared in accordance with the Design Manual.

L. Traffic Signal Plans

All plans shall be prepared in accordance with the Design Manual.

M. Lighting Plans

All plans shall be prepared in accordance with the Design Manual.

N. Structural Services

All services shall be performed in accordance with the latest standards adopted by AASHTO, Department Standard Specifications, Design Manual, Structures Manual, and direction as furnished to the Consultant from the Central and District Structures Design Offices. Plans shall be accurate, legible, complete in design, and drawn to the appropriate scale. All plans shall be furnished in reproducible form on material acceptable to the Department.

O. Utility Services

All work shall be in accordance with the Department's Utility Accommodation Manual, Standard Specifications, current memorandums, Design Manual, and instructions as issued by the Department to the Consultant, and shall be accurate, legible, complete in design, drawn to the appropriate scale and furnished in reproducible form on material acceptable to the Department. Plans shall be prepared totally by CADD.

VI. GENERAL

A. Meetings

The Consultant shall meet on a monthly basis with representatives of the Department at the Department's office, the Consultant's office, or at the project site, for the purpose of reviewing the status of assigned tasks. Only representatives from the Consultant firms that are actively engaged in the work effort on a current assigned task will need to attend the individual monthly meetings. Attendance by a representative of the ITS Consultant shall be as needed to maintain project continuity. The Consultant shall provide summary minutes within five (5) working days after each meeting for review and approval by the Department. The frequency, location and duration of the meetings will be established by the Department Project Manager.

B. Consultant's Schedule of Activities

Within ten (10) days after issuance of a Task Work Order the Consultant shall provide a schedule of project milestones for an assigned task. Depending on the difficulty of the assigned task, the schedule may be in accordance with the Department's Primavera Schedule and accompanied by an anticipated payout curve. The schedules and anticipated payout curves shall be prepared in a format acceptable to the Department.

Within five (5) days following acceptance of the project milestone schedule for the assigned task, the Consultant shall prepare and submit a schedule for Consultant activities. For purposes of scheduling Consultant shall allow four (4) weeks Department review time for each submittal. All schedules shall be updated and resubmitted for Department approval at anytime prior schedules become obsolete.

C. Coordination with Other Consultants

The Consultant shall coordinate his work with any and all adjacent and integral Consultants so as to effectively complete homogeneous plans and specifications for the projects described herein and any relative projects.

D. Construction Cost Estimates and C.E.S. Quantities

Cost Estimates: The CONSULTANT shall be responsible for producing a construction cost estimate (*Engineer's Estimate and LRE or TRNS*PORT estimate*) and reviewing and updating *those* cost estimates *within twenty-one (21) days after issuance of a Task Work Order for a new project*, when scope changes occur, at *production* milestones of the project, *for the annual Work Program Update Cycle, and when directed by the DEPARTMENT Project Manager*. Prior

to 60% plans and completion of quantities, the DEPARTMENT's Long Range Estimate (L.R.E.) system will be used to produce a conceptual estimate, according to District policy. Once the quantities have been developed (beginning at 60% plans and no later than 90% plans) the CONSULTANT shall be responsible for imputing the pay items and quantities into TRNS*PORT PES (Proposal Estimating System) *as approved by the DEPARTMENT* through the use of the DEPARTMENT's Designer Interface. A Summary of Pay Items sheet shall be prepared with all required Phase II, III, and IV Plans submittals. *Each Engineer's Estimate and LRE/TRNS*PORT submittal shall be accompanied by an equal number of copies of the Preliminary Project Report (PPR) updated by the CONSULTANT in the District standard format, including the updated Record Page. Within two (2) weeks after Task Work Order Authorization, the CONSULTANT shall schedule a meeting with the DEPARTMENT Project Manager, District PS&E Manager and the General Engineering Consultant (GEC) who prepared the most recent construction cost estimate for the DEPARTMENT during the annual Work Program Update Cycle. The purpose of this meeting shall be to review the DEPARTMENT's estimate and transfer maintenance and update responsibility for the estimate for the CONSULTANT during design. When modifications to the estimate are recommended by the CONSULTANT, such modifications shall be detailed by the CONSULTANT and reviewed by the District PS&E Manager prior to any Work Program Update requests.*

Note: The Consultant shall expend the necessary effort to ensure that the cost estimates submitted are as accurate and current as all known conditions at the time of the submittal. If costs increase or decrease, the Consultant shall explain on the 'Transmittal of Construction Cost Estimate'. The Consultant shall be prepared to defend the estimate and the differences in the estimated construction costs.

E. Technical Special Provisions/Specification Package

The Consultant shall prepare and provide a complete Specification Package, including Technical Special Provisions (TSP) for all items of work. Permits obtained by the Department and Utility Relocation schedules/utility TSP will be provided to the Consultant for inclusion. The current Supplemental Specifications and Special Provisions are available on the Internet. Standard Specifications, Supplemental Specifications, or Special Provisions should not be modified unless absolutely necessary to control specific project requirements. The District Specification Office must approve any modifications to these standards, in order to be included in the Project's Specification Package. The Specification Package shall be unbound, with text on one side only, on 8" by 11" sheets. The Specification Package shall be signed, sealed, and dated in accordance with Chapter 471 or Chapter 481, FS as appropriate. The Specification Package must be submitted to

the District Specification Office by the first mail date. The Specification Package must be submitted for legal review at least 14 days before the 2nd mail date. The legal review must be obtained, comments resolved, and the submittal of the final, signed and sealed Specifications must occur at least 5 days prior to 2nd Mail Date.

F. Professional Endorsement

The CONSULTANT shall have a Licensed Professional Engineer in the State of Florida sign and seal all reports, documentation and plans as required by DEPARTMENT standards.

All plans and specifications deliverables provided for herein shall support a fully electronic advertisement, bidding and letting process for the construction contract in a manner acceptable to the DEPARTMENT, including compliance with District Seven's "Processing Guideline for Electronic Projects." In addition to any required hard copies, the CONSULTANT shall provide .pdf files for all plans phase submittals. Beginning with the Second Mail submittal for letting, the CONSULTANT shall provide electronic "smart" files. In addition to any required hard copies, all other documents that require DEPARTMENT review shall be submitted in an electronic medium acceptable to the DEPARTMENT Project Manager, including processing through the Department's Electronic Review and Comment system (ERC).

G. Plans and Documentation Reproduction

The Consultant shall furnish, as required, the number of plans on xerographic bond and/or in an electronic medium acceptable to the Department as required for each phase submittal for the project by the Department to adequately control, coordinate, and approve the plans for both utility and design considerations. The Consultant shall also furnish, as required, the following items for the project:

1. Five (5) copies of Design Documentation.
2. Seven (7) copies of Summary of Pay Items.
3. Seven (7) copies of Computation Book.
4. Fourteen (14) copies of Comment Responses.
5. One (1) copy of Peer Review Plans.

The Consultant shall contact the FDOT Project Manager before submittal to verify the exact quantity for each item and the location(s) where the document(s) shall be delivered. The Consultant shall be responsible for sorting and packaging all submittal material and delivering all packages to location(s) furnished by the FDOT Project Manager. The Consultant shall utilize a standard submittal letter provided by the Department to organize and accompany each submittal package delivered.

Each Package shall be enclosed in an envelope or envelopes and addressed as instructed by the Department's Project Manager.

H. Design Documentation

1. Project Design Report

To facilitate design and quality assurance/control reviews, the Consultant shall commence for the project at the onset of the services a written Design Report that will be part of the Design Documentation Booklet. A copy of this document for the project shall be submitted to the Department within two (2) weeks of issuance of a Task Work Order.

The purpose of the Project Design Report is to provide the Department with a clear understanding of project objectives, design criteria, and procedural approaches used in the development of the project. Also, this document assists the Consultant and the Department in assuring conformance to established criteria.

The Project Design Report shall provide a detailed description of the project requirements as set forth in the technical criteria established for this project. This report shall also include an ongoing narrative detailing the design assumptions and decisions made during the project. This document shall also include the findings and recommendations from the safety review and a copy of any other pertinent supporting data. This document shall be periodically updated (at least with each phase submittal) and resubmitted as design notes, computations, and additional criteria are established during the project and shall also serve as the basis for reports, design analyses, and plan preparation.

The report shall be prepared on 8-1/2 inch by 11 inch pages, one side, and shall be bound on the left-hand side. A title page shall be included and should provide the following information. A table of contents shall also be included:

- a. Project Design Report
- b. Florida Department of Transportation
- c. Financial Project ID
- d. Federal Project ID
- e. County Name
- f. County Section Number
- g. Project Description
- h. Date Prepared/Date Updated
- i. Consultant's name and address

At the project completion, a final Project Design Report, signed and sealed by the responsible Florida registered professional engineer, shall be submitted with the record set of plans and tracings.

2. Design Notes and Computations

The Consultant shall submit to the Department design notes and computations to document the design methodology conclusions made during the development of the project design and construction plans. Design notes and computations may be included as part of the Design Documentation Booklet.

The design notes and computations shall be recorded on one-sided 8-1/2 inch by 11 inch computation sheets, fully titled, numbered, dated, indexed and signed by the designer and checker. Computer output forms and other oversized sheets shall be reduced to 8-1/2 inches by 11 inches size. The data shall be bound, indexed and titled for submittal to the Department.

I. Phase Reviews

Plans will be reviewed by the Department at intervals specified by the Department, including phase review submittals Phase I (30%) (May not be required on all task assignments), Phase II (60%), Phase III (90%), and Phase IV (100%). The content of phase submittals shall conform, as much as possible, to the current Department Design Manual (PPM).

The Consultant shall be responsible for all phase review coordination. A joint office phase review meeting with Department personnel, other appropriate agencies, and the Consultant's staff (including their Constructability Reviewers) shall be scheduled to resolve critical issues and/or design problems affecting the project. As part of the completion of Phase III review, a field walk through review, by the Consultant Project Manager, FDOT Project Manager, and other appropriate FDOT personnel (including Construction and Maintenance) shall be conducted. If necessary as part of the final review, another field walk through review, by the Consultant Principal, Consultant Project Manager, FDOT Project Manager, and other appropriate FDOT personnel (including Construction and Maintenance) shall be conducted.

The Consultant shall transmit phase review plan sets to locations as indicated by the Department's Project Manager. A Consultant transmittal letter shall also be delivered to the FDOT Project Manager for each submittal. Consultant responses to comments from the previous phase reviews by the Department shall be submitted to the Department no later than one (1) week prior to the next phase submittal. A

marked set of prints indicating the peer reviewers for each component set shall be required with each phase submittal.

Attention is directed to Chapters 16 and 17 of the Design Manual. Consultants and Department staff shall follow these guidelines. It is the intention of the Department that Design Consultants are held responsible for their work, including plans review. Detailed checking of Consultant plans or assisting in designing portions of the project for the Consultant is not the intent of having external design Consultants. The purpose of Consultant plans reviews are to ensure that Consultant plans follow the plan preparation procedures outlined in the Design Manual, that state and federal design criteria are followed with the Department concept, and that the Consultant submittals are complete.

J. Disposition of Plan Review Comments

The Consultant shall submit to the Department, within two (2) weeks of the receipt of comments, the disposition of all plan review comments in written form.

K. Americans With Disabilities Act (ADA)

All pedestrian features included in this project shall be designed in full compliance to the American With Disabilities Act (ADA).

VII. DEPARTMENT RESPONSIBILITIES

The Department, at their option, may delegate any or all Department functions and responsibilities to a General Consultant, who shall act as an extension of the Department's staff and should receive the same courtesies and cooperation as the Department. The Department shall furnish any or all of the items listed below as appropriate, for the performance of the required services:

- A. Any available as-built plans for a project area related to an assigned task.
- B. Coordination and processing of permit applications, as necessary.
- C. Provide phase reviews on all plans.
- D. Permit the Consultant to utilize the Department's data processing and computer services for programs requested by the Consultant and approved by the Department.

VIII. COMPUTER SERVICES

The use of Computer-Aided Drafting and Design (CADD) is mandatory for the performance of services required in connection with this project. Services will conform to "Computer Aided Design and Drafting (CADD) Manual", "Design Manual", and "Structures Manual".

Assigned projects ***shall*** be developed utilizing Computer Aided Drafting and Design (CADD) systems. The Department makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the Consultant to meet the requirements in the Department's CADD Manual ***and CADD Production Criteria Handbook (including the minimum 95% compliance threshold for all design files)***. The Consultant shall submit final documents and files as described ***in each task work order.***

IX. LENGTH OF SERVICES

Services to be rendered by the Consultant may commence upon execution of this Consultant Agreement. Individual tasks shall be assigned for a period of sixty (60) months from the date of the Agreement, or until a total accumulated fee of \$5,000,000 is reached. The time of completion of each assigned task will be stated in the Scope of Services for that particular Task.

The Department shall furnish a Task Work Order to the Consultant for the assignment of the individual projects. The Task Work Order shall identify the assigned project, specify the services to be performed, and state the compensation for the services. The Task Work Order shall be signed by the Department's Procurement Services Manager. No work will be commenced by the Consultant until a Task Work Order has been issued.